

**JIM McFAULL**

**VLF-EM SURVEYS &  
PROSPECTING AT THE  
MELINDA AND QUARTZ CLAIMS,  
DAWSON AND SIXTY MILE AREAS,  
YUKON TERRITORY**

**094182**

M.A. Power  
**AMEROK GEOSCIENCES LTD.**

CLAIMS

<u>Claim</u>	<u>Grant No.</u>
Melinda 1-5	YB40909-13
Melinda 6-7	YB40914-15
Melinda 8-15	YB40916-23
Melinda 16-17	YB41493-94
Melinda 18-19	YB41495-96
Quartz 1-4	YA 79880-83



Location: MELINDA: 64° 02'N 139° 08'W  
QUARTZ: 63° 59'N 140° 47'W

NTS: MELINDA: 116 B / 3  
QUARTZ: 115 N / 15

Mining District: Dawson, YT  
Date: August 24, 2000

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 4200.00.

*M. B. ...*  
Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

## SUMMARY

A two man crew installed survey grid and conducted VLF-EM surveys and prospecting on the MELINDA Claims (NTS 116 B/3) and QUARTZ Claims (NTS 115 N/15). The MELINDA Claims are centred on Australia Hill near the confluence of Hunker Creek with the Klondike River. They are underlain by Paleozoic metasediments which are intruded and overlain by Tertiary volcanic rocks. Gold mineralization is associated with the Tertiary Ross Formation rocks. The VLF-EM survey and prospecting failed to identify any conductors or mineral occurrences of interest. The QUARTZ Claims are underlain by Paleozoic metasedimentary and meta-igneous rocks intruded and overlain by Cretaceous Carmacks Group volcanic rocks. Economic mineralization in the area of the QUARTZ Claims consists of veins and stockworks in Carmacks Group rocks. The VLF-EM survey identified 4 conductors, one of which is persistent over a strike length of 200 m. No significant assays were returned from bedrock samples.

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Figure 8. QUARTZ Claims - VLF- Fraser filter map .....	Back pocket

## 1.0 INTRODUCTION

This report describes gridding, very low frequency electromagnetic (VLF-EM) surveys and prospecting conducted on the MELINDA and QUARTZ Claims in the Dawson and Sixty Mile areas, central Yukon Territory. The surveys were conducted to identify gold mineralization on the properties. A two man crew put in 9.1 line-km of grid, ran the VLF surveys and prospected the grid area between May 24 and May 27, 2000. This report describes the survey and prospecting program specifications, and results.

## 2.0 LOCATION AND ACCESS

This report describes work conducted on two separate properties located in the Dawson Mining District, central Yukon Territory (Figure 1). The MELINDA Claims are centred at 64° 02'N 139° 08'W on NTS 116 B/3. The claims are located on Australia Hill, southeast of the confluence of Hunker Creek with the Klondike River. The property is readily accessible by two wheel drive vehicle from Dawson. The route to the property is as follows:

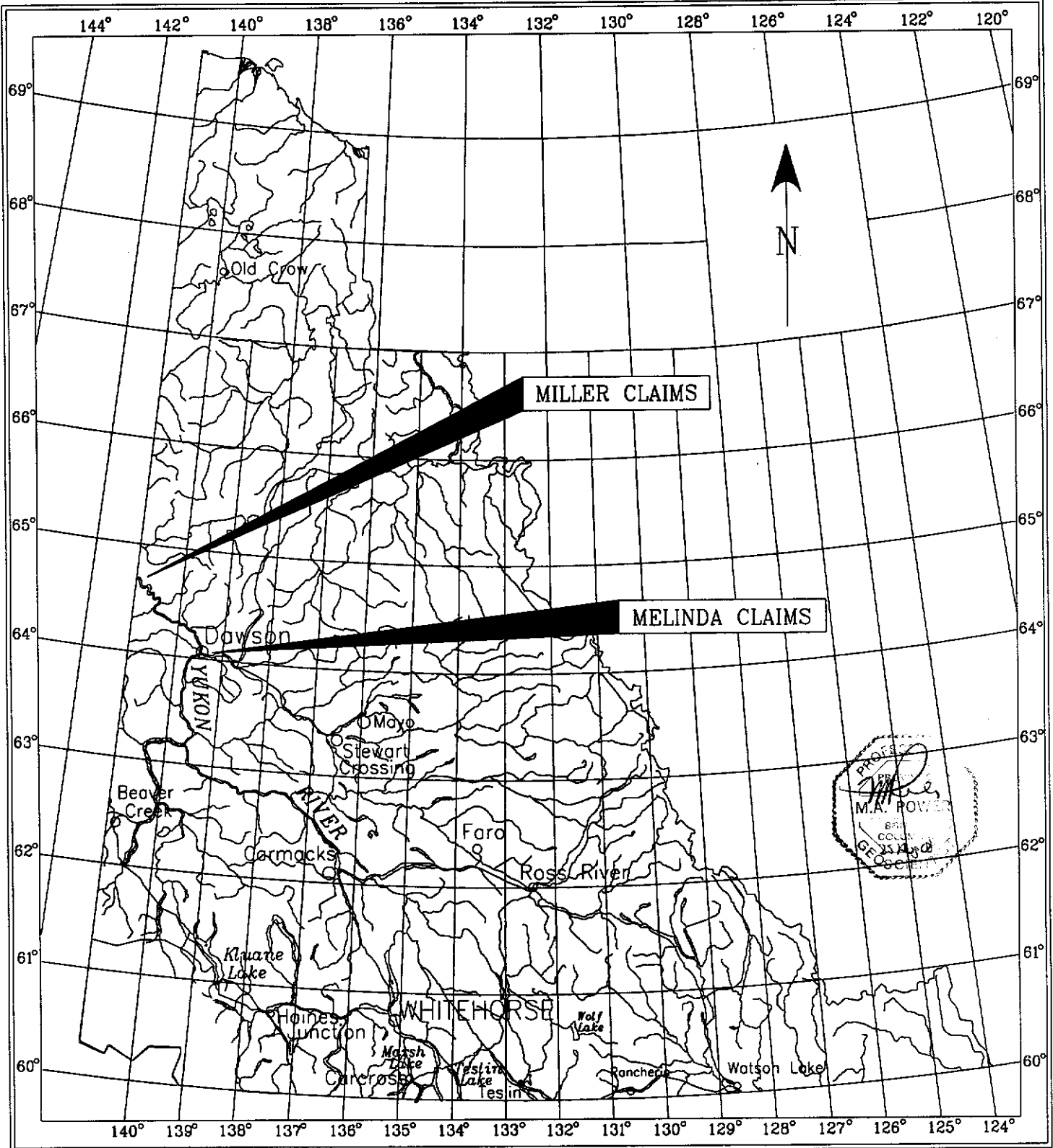
Dawson to Hunker Creek Road	16 km
Hunker Creek Road to property boundary	2 km

The QUARTZ Claims are centred at 63° 59'N 140° 47'W, immediately upstream (NW) of the confluence of Miller Creek with the Sixty Mile River on NTS 115 N/15. This property is accessible by four wheel drive vehicle from Dawson during the late spring through fall period when the ferry is running across the Yukon River. The route to the property is as follows:

Dawson to Sixty Mile Road turnoff on the Top of the World Highway	85 km
Sixty Mile Road to property	12 km

## 3.0 MELINDA - PROPERTY DESCRIPTION

The MELINDA Claim Group consists of 16 claims staked under the Yukon Quartz Mining Act in the Dawson Mining District, Yukon. Data for the MELINDA Claims is summarized below:



JIM MCFAULL		MELINDA AND MILLER CLAIMS	
PROPERTY LOCATION		MINING DISTRICT: DAWSON	
		NTS: 116B/3,C/2	SCALE 1: 6 000 000
AMEROK GEOSCIENCES LTD.		DRAWN BY GS, CP	
		DATE: 31 JUL 00	FIGURE: 1

<u>Claim</u>	<u>Grant No.</u>	<u>Owner</u>	<u>Expiry date</u> <sup>1</sup>
Melinda 1-5	YB40909-13	Jim McFaul (100%)	December 30, 2000
Melinda 6-7	YB40914-15	Jim McFaul (100%)	June 30, 2003
Melinda 8-15	YB40916-23	Jim McFaul (100%)	June 30, 2002
Melinda 16-17	YB41493-94	Jim McFaul (100%)	September 22, 2000
Melinda 18-19	YB41495-96	Jim McFaul (100%)	September 22, 2002

The locations of the MELINDA Claims, sample locations and the survey grid are shown in Figure 2.

#### 4.0 MELINDA - PROPERTY GEOLOGY AND ECONOMIC MINERALIZATION

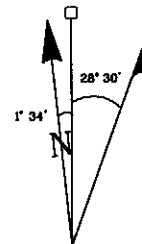
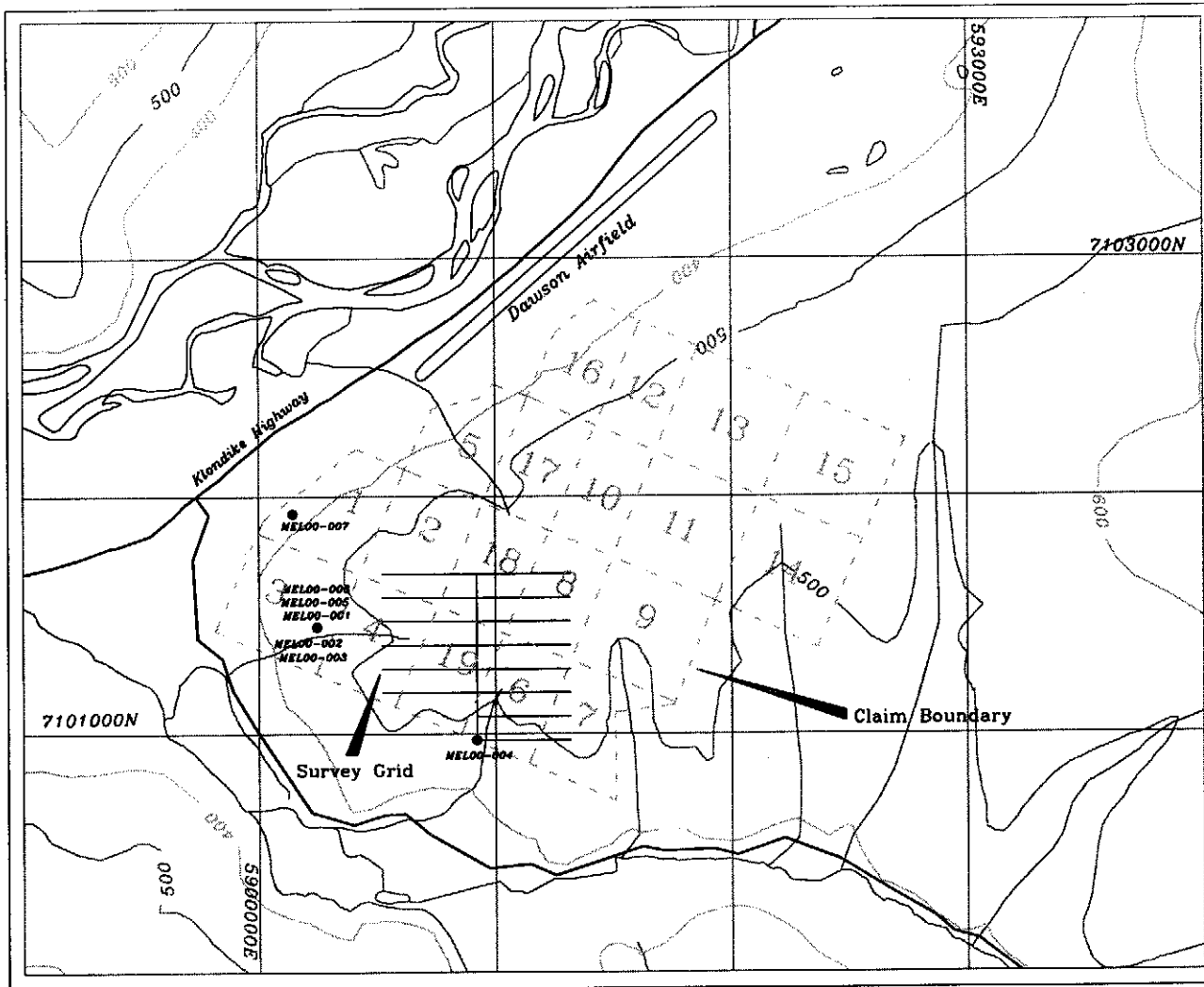
The regional geology of the area containing the MELINDA Claims is summarized by Gordey and Makepiece (1999) and is shown in Figure 3. The property is underlain by the Devono-Mississippian Nasina Assemblage (**DMN1**), which is intruded and overlain by Ross Formation (**ITR**), a sequence of leucocratic felsic quartz feldspar porphyry and rhyolite, minor acid tuff breccia, and ignimbrite in flows, stocks and dykes.

The property is immediately south of the Tintina Fault in an area of poor bedrock exposure. No significant structures are mapped on the property although it seems probable that subsidiary faults related to the Tintina Fault occur in the area.

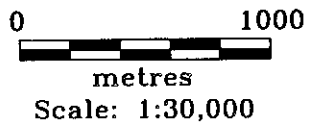
Economic mineralization in the area is associated with the Ross Formation. The closest showing to the property is the HATTIE (Minfile 116B081). Mineralization consists of quartz veins carrying malachite and free gold with reputed assays to 34.2 g/t Au. The area covered by the MELINDA Claims was explored most recently by Kennecott who determined that gold in the Ross Formation and overlying Quaternary sediments is confined largely to the base of the Quaternary sediments and does not constitute an economic target. Placer operations have recovered topaz, tourmaline, fluorite and cinnabar, probably from Ross Formation intrusive rocks.


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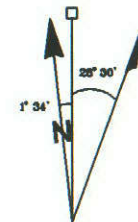
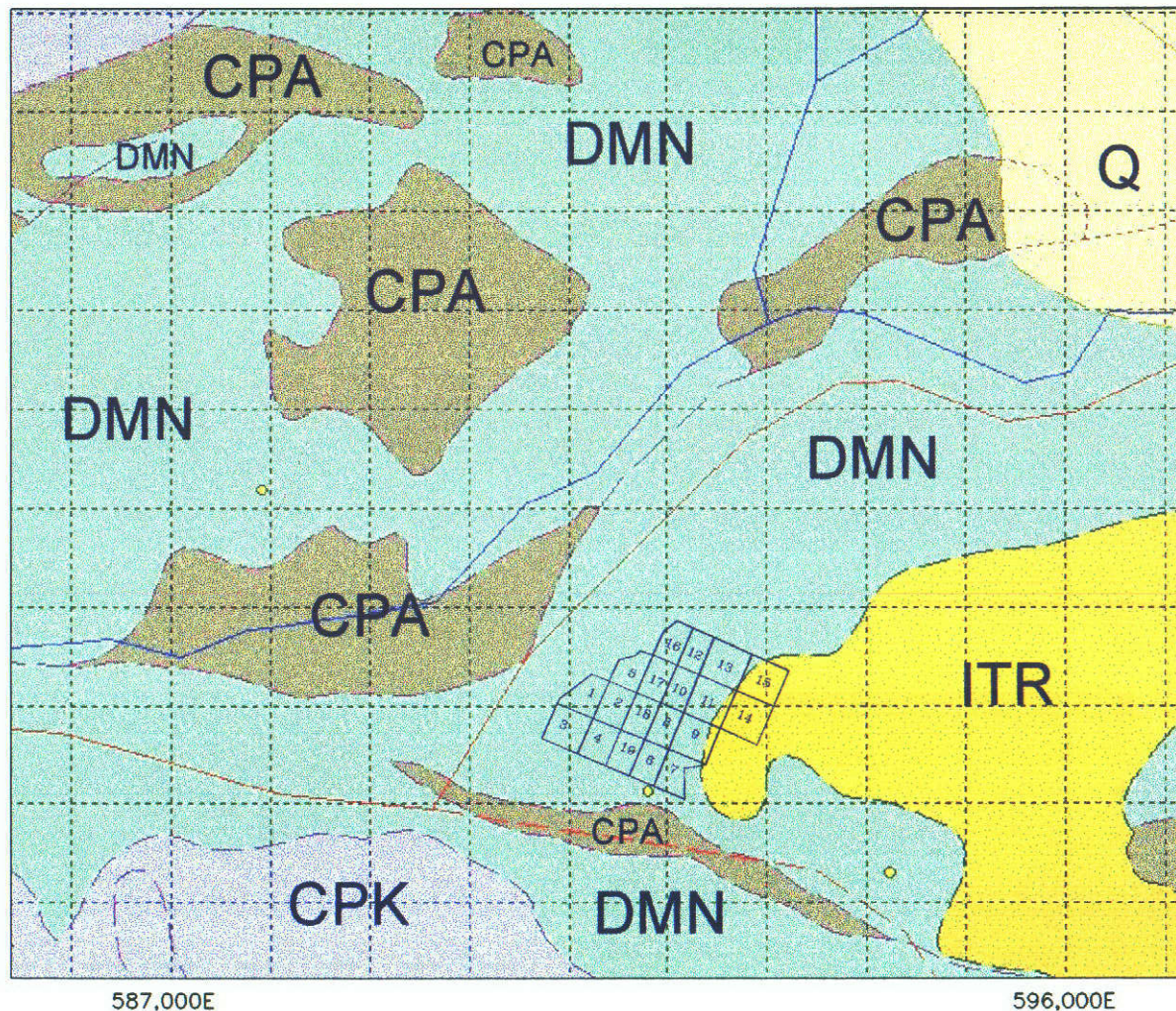
<sup>1</sup>Expiry date of record on August 18, 2000



● - Sample location  
MELO-007



JIM MCFAULL	MELINDA CLAIMS	
	NTS: 116 B/3	Datum: NAD83
EM-16 SURVEY CLAIM LOCATION MAP FIGURE 2.	Mining District: Dawson	
	Job: 00-007	Date: 15 Aug 00
	 <b>AMEROK GEOSCIENCES LTD.</b>	



7,107,000E

### LEGEND


- Q Quaternary
  - ITR Ross
  - CPA Anvil
  - CPK Klondike Schist
  - DMN Nasina
- 12 Claim Boundary

7,100,000E

587,000E

596,000E



<b>JIM MCFAULL</b>	<b>MELINDA CLAIMS</b>	
	NTS: 116 B/3	Datum: NAD83
<b>REGIONAL GEOLOGY MAP</b> <b>FIGURE 3</b>	Mining District: Dawson	
	Job: 00-007	Date: 15 Aug 00
	 <b>AMEROK GEOSCIENCES LTD.</b>	



\*Geology after Gordey and Makepeace (1999)

**Table I. Stratigraphy**  
(After Gordey and Makepiece (1999))

Rock unit (age)	Lithology
<b>Q</b> - Quaternary sediments (Tertiary)	Unconsolidated glacial, glaciofluvial and glaciolacustrine deposits; sand, silt and gravel with thin volcanic ash
<b>ITR</b> - Ross Formation (Eocene)	mixed bimodal volcanics (basalt, rhyolite) and terrestrial clastics, dominantly along or near Tintina Fault; farther removed, scattered occurrences of rhyolitic lava and dikes
<b>CPA</b> - Anvil (Permian)	dominantly oceanic assemblage of mafic volcanics, ultramafics, chert and pelites, limestone and gabbroic rocks
<b>CPK</b> - Klondike Schist (Carboniferous and Permian)	poorly understood assemblage of metamorphosed pelitic/volcanic rocks and minor marble, including phyllite of uncertain association
<b>DMN</b> - Nasina Group (Devonian - Mississippian)	graphitic quartzite and muscovite quartz-rich schist with interspersed marble

## 5.0 MELINDA - GRID AND VLF SURVEY PARAMETERS

The geophysical surveys were conducted by Ron Stack and Christine Purves on a picketed grid centred at UTM (NAD83) 591000E 7101400N (Figure 2). The grid consists of 5.6 line-km of survey lines turned from a 700 m base line oriented at 0°. Lines were slope-changed and picketed at 25 m intervals. Only the base line was cut out.

The VLF survey was conducted using a Geonics EM-16 VLF receiver measuring the Jim Creek, Wa. (NLK - 24.8 KHz) VLF transmitter and recording the in-phase and quadrature components. All measurements were taken facing grid east. A bedrock conductor would produce a positive to negative cross over moving from west to east along the survey lines.

The results of the surveys are shown in Figures 4 and 5. Figure 4 displays stacked profiles of the in-phase (solid) and quadrature (dashed) components of the VLF-EM field. One very weak shallow bedrock conductor (**A**) is identified in this plot. Figure 5 is a contour map of the Fraser filtered in-phase component. No significant VLF-EM anomalies were detected on the grid.

## 6.0 MELINDA - PROSPECTING RESULTS

Prospecting was conducted concurrently with the installation of the grid and afterwards during the VLF survey by Ron Stack. A total of 7 samples were collected. Sample locations are shown in Figure 2, sample descriptions are contained in Appendix D and assay certificates are in Appendix E. None of the samples returned economically significant values in gold or silver.

## 7.0 QUARTZ - PROPERTY DESCRIPTION

The QUARTZ Claim Group consists of 4 claims staked under the Yukon Quartz Mining Act in the Dawson Mining District, Yukon. Data for the QUARTZ Claims is summarized below:

<u>Claim</u>	<u>Grant No.</u>	<u>Owner</u>	<u>Expiry date</u> <sup>2</sup>
Quartz 1-2	YB79882-83	Jim McFaul (100%)	June 4, 2004
Quartz 3-4	YB79880-81	Jim McFaul (100%)	June 4, 2004

The locations of the QUARTZ Claims, sample locations and the survey grid are shown in Figure 6.

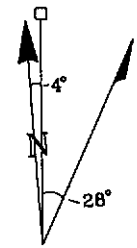
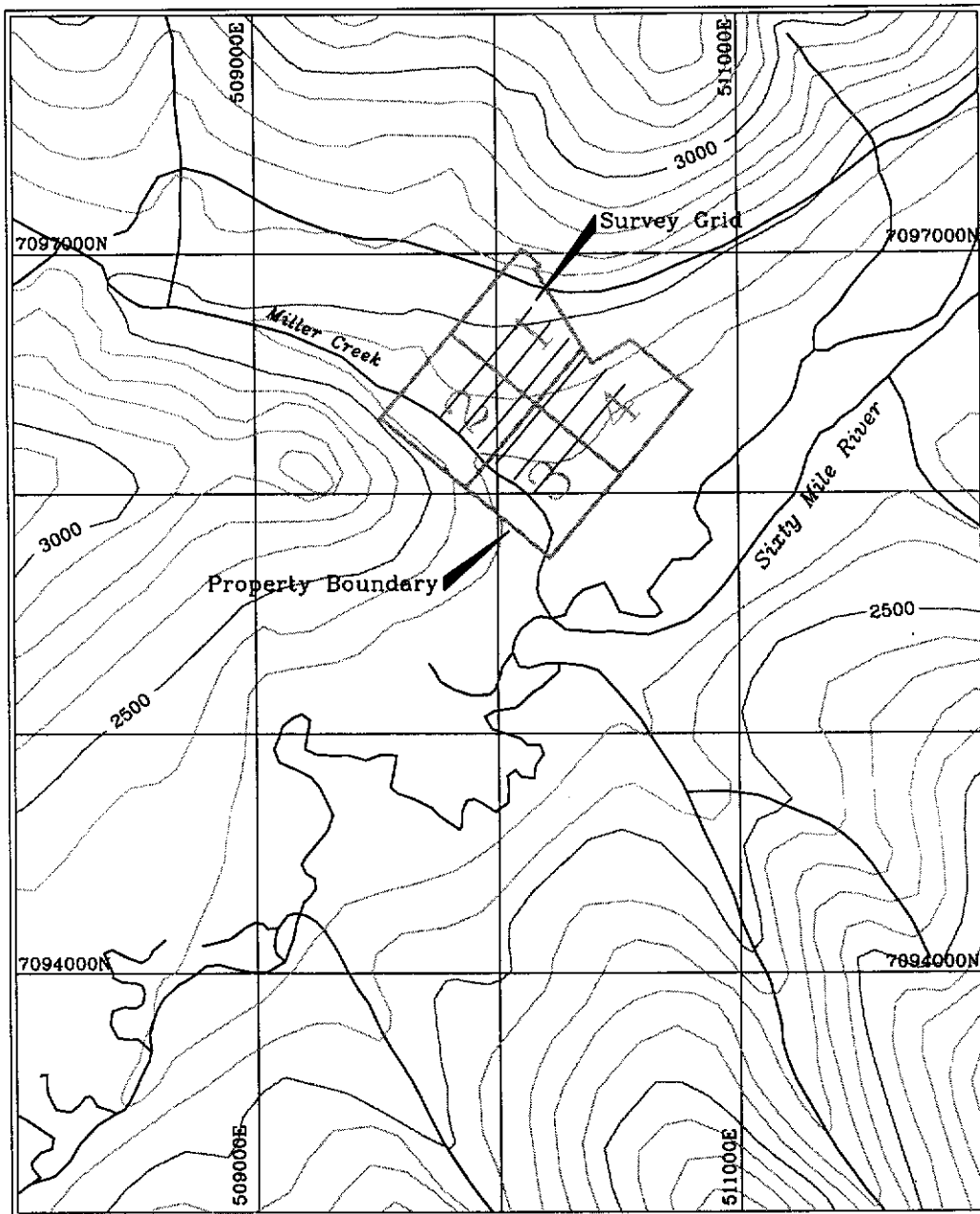
## 8.0 QUARTZ - PROPERTY GEOLOGY AND ECONOMIC MINERALIZATION

The regional geology of the area containing the QUARTZ Claims is summarized by Gordey and Makepiece (1999) and is shown in Figure 7. The area of the property is underlain by Paleozoic Klondike Schist, Anvil Formation and Pelly gneiss intruded by Carmacks Group felsic and basic volcanic rocks.

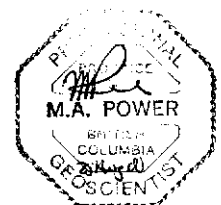
The closest mineral showing is the PER Occurrence (Minfile 115N041) which occurs immediately southwest of the QUARTZ Claims. This showing consists of galena, sphalerite and arsenopyrite in a 61 m long, up to 60 cm wide vein cutting a small

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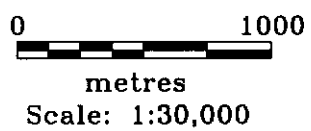
<sup>2</sup>Expiry date of record on August 18, 2000




Datum: NAD27



Elevation in feet above mean sea level



JIM MCFAULL	QUARTZ 1-4	
	NTS: 116 C/2, 115 N/15	
EM-16 SURVEY CLAIM LOCATION MAP FIGURE 2.	Mining District: Dawson	
	Job: 00-007	Date: 07 Jun 00
	 <b>AMEROK GEOSCIENCES LTD.</b>	

down-faulted block of Carmacks Group volcanics. Staked in 1920 by placer miners, best reported assays returned 428.6 g/t Ag, 26.4% Pb, 4.7% Zn, and 1.4 g/t Au over a 76 cm width. Nearby, a 91 m wide zone of altered andesite containing massive pyrite lenses, quartz stockworks, and disseminated chalcopyrite and galena returned assays up to 26 g/t Au and 3497 g/t Ag.

## 9.0 QUARTZ - GRID AND VLF SURVEY PARAMETERS

The geophysical surveys were conducted by Ron Stack and Christine Purves on a picketed grid centred at UTM (NAD27) 510200E 7096400N (Figure 6). The grid consists of 3.5 line-km of survey lines turned from a 500 m base line oriented at 310°. Lines were slope-changed and picketed at 25 m intervals. Only the base line was cut out.

The VLF survey was conducted using a Geonics EM-16 VLF receiver measuring the Jim Creek, Wa. (NLK - 24.8 KHz) VLF transmitter and recording the in-phase and quadrature components. All measurements were taken facing grid east. A bedrock conductor would produce a positive to negative cross over moving from west to east along the survey lines.

The results of the surveys are shown in Figures 7 and 8. Figure 7 displays stacked profiles of the in-phase (solid) and quadrature (dashed) components of the VLF-EM field. Figure 8 is a contour map of the Fraser filtered in-phase component. Four weak conductors were located by the VLF survey. Conductor **A** is the strongest and most continuous of the group and occurs in an area containing scrap metal and equipment. It appears unlikely that the anomaly is caused by surficial debris however.

## 10.0 QUARTZ - PROSPECTING RESULTS

Prospecting was conducted concurrently with the installation of the grid and afterwards during the VLF survey by Ron Stack. Two samples were taken. Sample locations are shown in Figure 6, the samples are described in Appendix D and assay certificates are in Appendix E. None of the samples returned economically significant values in gold or silver.

## 11.0 CONCLUSIONS

The results of the prospecting and VLF-EM survey suggest the following conclusions:

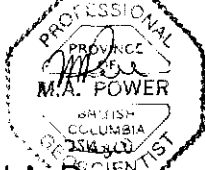
- a. No significant VLF-EM conductors or mineral occurrences were found on the MELINDA Claims.
- b. Four VLF-EM conductors were located on the QUARTZ claims. No significant mineral occurrences were discovered.

## 12.0 RECOMMENDATIONS

The following recommendations are made based on the conclusions of this work:

- a. The cursory exploration programs described in this report were not sufficient to evaluate the mineral potential of the MELINDA and QUARTZ Claims. Further work is required on both properties.
- b. Geological mapping and prospecting should be conducted on the MELINDA Claims focussing on the Ross Formation intrusive rocks and areas near the contacts.
- c. The VLF-EM conductors on the QUARTZ Claims should be investigated by prospecting and geological mapping followed by trenching if results so warrant.

Respectfully submitted,  
**AMEROK GEOSCIENCES LTD.**



Michael A. Power, M.Sc. P.Geo.  
Geophysicist

## References Cited

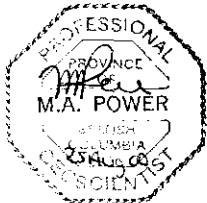
- Gordey, S.P. and Makepeace, A. J. (1999). Yukon Digital Geology. Geological Survey of Canada Open File D3826
- McNeill, J.D. and V.F. Labson (1990) Geological Mapping Using VLF Radio Fields. in: Nabighian, M.N. (ed.) Investigations in Geophysics No. 3. Electromagnetic Methods in Applied Geophysics. Volume 2, Application , Part B. Tulsa: Society of Exploration Geophysics.
- Telford, W.M., L.P. Geldart and R.E. Sheriff (1990) Applied Geophysics (2<sup>nd</sup> Edition) New York: Cambridge University Press.

## APPENDIX A. CERTIFICATE

I, Michael Allan Power, with residence and business address in Whitehorse, Yukon Territory do hereby certify that:

1. I hold a B.Sc. (Honours) in Geology granted in 1986 and M.Sc. in Geophysics granted in 1988, both from the University of Alberta.
2. I have been actively involved in mineral exploration in the northern Cordillera and in the Northwest Territories since 1988. I am a professional geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (Registration number 21131). I am also a professional geophysicist registered with the Northwest Territories Association of Professional Engineers, Geologists and Geophysicists (NAPEGG) (Licence L942).
3. I have no interest, direct or indirect, in the MELINDA or QUARTZ Claims nor do I hope to receive any.

Dated this 24<sup>th</sup> day of August 2000 in Whitehorse, Yukon Territory.



Michael A. Power, M.Sc. P. Geo. P. Geoph.  
Geophysicist

## APPENDIX B. SURVEY LOG

### JOB 2000-007 MELINDA / QUARTZ CLAIMS

Personnel: Ron Stack (RS)  
Christine Purves (CP)

Wed 24 May 00 Mobilized to Dawson (AM); located grid origin and began work on baseline at MELINDA Claims (PM)

Thu 25 May 00 Gridding, VLF surveys and prospecting on the MELINDA Claims; picked up a 4x4 truck for the QUARTZ Claims survey in the evening.

Fri 26 May 00 QUARTZ Claims survey; drove to property in early AM, put in grid (CP / RS), VLF survey (CP) and prospecting (RS). Returned late that evening.

Sat 27 May 00 MELINDA Claims survey. Worked during the morning and returned to Whitehorse in the afternoon. CP ran VLF surveys and RS prospected.

#### Staff:

Ron Stack  
P.O. Box 100086  
Whitehorse YT Y1A 4Z6

Christine Purves  
16 Alsek Road  
Whitehorse YT  
Y1A 3J8

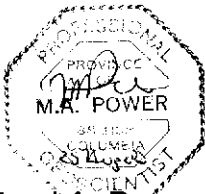
**APPENDIX C. STATEMENT OF EXPENDITURES**

Mobilization / demobilization	\$1,500
Surveys: 2.0 days @ \$550	\$1,100
Accommodation	\$237
Meals	\$179
Truck rental (4x4) (Dawson)	\$178
Assays	\$173
Report	<u>\$900</u>
<b>Total:</b>	<b>\$4,554</b>

Expenses are apportioned as follows against the MELINDA and QUARTZ Claims by prorating expenses against time spent on each property:

<b>Claims</b>	<b>Expense</b>
MELINDA Claims	\$2731
QUARTZ Claims	\$1823

I certify that these expenses are correct to the best of my knowledge.



Michael A. Power, P.Geo.  
Geophysicist

## APPENDIX D. SAMPLE DESCRIPTIONS

### MELINDA CLAIMS

Sample MEL00-001

Location: 590245E 7101450N (NAD83)

Quartz: White weathering buff-white, coarse crystalline (2 -4 mm) with some white clay alteration and sparse bands of limonite.

Sample MEL00-002

Location: 590245E 7101450N (NAD83)

Quartz: White weathering buff brown, coarse crystalline (1-3 mm), sugary texture with vugs lined with drusy fine crystalline quartz and possible box works. Rare ribs of secondary quartz cross-cutting quartz mass. Also chlorite: dark green weathering green-gray, waxy foliated, lining and wrapping around quartz nodules.

Sample MEL00-003

Location: 590245E 7101450N (NAD83)

Chlorite schist: dark green-grey weathering same. Foliated, shiny on shear faces, slickensided with discontinuous quartz laminae up to 1 mm.

Sample MEL00-004

Location: (0N 0E on baseline road cut) 590920E 7100973N (NAD83)

Quartz: white-grey weathering same. Coarse crystalline bull quartz. Some white clay and chlorite nodules up to 6 cm within.

Sample MEL00-005

Location: 590245E 7101450N

Quartz vein: black and white grey weathering grey. Quartz (to 5 mm), graphite and chlorite from weathered vein material. Vuggy, slight sulphide odour, chlorite is black and sheared.

Sample MEL00-006

Location: 590245E 7101450N (NAD83)

Quartz: white weathering grey and rusty brown red. Coarse crystalline bull quartz from float boulder.

Sample MEL00-007

Location: 590144E 7101928N (NAD83)

Quartz: white weathering grey and rusty brown red with a small amount of green chlorite. Coarse crystalline bull quartz from float boulder.

### QUARTZ CLAIMS

Sample QTZ00-01

Location: 510025E 7096168N (NAD27)

Quartz: white weathering brown, coarse crystalline (2-4 mm) with (?) fine sulphides (?pyrite).

Sample QTZ00-02

Location: 509801E 7096354N (NAD27)

Diorite: Black weathering rusty brown. Medium to coarse crystalline (0.2-1mm). Plagioclase in a dark ground mass.

**APPENDIX E. ASSAY CERTIFICATES**

06/07/2000

Certificate of Analysis

# of pages (not including this page): 1

Amerok

WO# 00049

Certified by   
 Justin Lemphers (Senior Assayer)

Date Received: 26/06/00

**SAMPLE PREPARATION:**

Code	# of Samples	Type	Preparation Description (All wet samples are dried first.)
r	9	rock	Crush to -10 mesh; riffle split 200g; pulverize to -100 mesh

**ANALYTICAL METHODS SUMMARY:**

Symbol	Units	Element	Method (A:assay) (G:geochem)	Fusion/Digestion	Lower Limit	Upper Limit
Au 30g	ppb	Gold	G: FA/AAS	30g FA / aqua regia	5	7000

AAS = atomic absorption spectrophotometry  
 FA = fire assay

1000ppb = 1ppm = 1g/mt = 0.0001% = 0.029166oz/ton


06/07/2000

Certificate of Analysis

Page 1

Amerok

WO# 00049

Certified by 

Sample #	Au 30g ppb
r MEL00-001	6
r MEL00-002	6
r MEL00-003	6
r MEL00-004	5
r MEL00-005	6
r MEL00-006	<5
r MEL00-007	<5
r QTZ00-001	13
r QTZ00-002	5



**CERTIFICATE OF ANALYSIS**  
**iPL 00F0673**

INTERNATIONAL PLASMA LABORATORY LTD

Client : Northern Analytical Laboratories  
Project: None Given

**9 Samples**  
9=Pulp

[067309:57:44:00070700]

Out: Jul 06, 2000  
In : Jun 30, 2000

Page 1 of 1  
Section 2 of 2

Sample Name	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
MEL00 - 001	2	2	<1	<0.01	0.08	0.10	0.31	0.03	0.01	0.01	<0.01
MEL00 - 002	3	1	<1	<0.01	0.14	0.05	0.34	0.05	0.03	0.01	0.01
MEL00 - 003	17	10	2	<0.01	0.32	0.30	4.85	0.21	0.10	0.03	0.06
MEL00 - 004	2	2	<1	<0.01	0.11	0.02	0.24	0.01	0.01	0.01	<0.01
MEL00 - 005	10	2	<1	<0.01	0.12	0.03	1.76	0.01	0.04	0.01	0.05
MEL00 - 006	1	<1	<1	<0.01	0.01	0.01	0.24	<0.01	<0.01	0.01	<0.01
MEL00 - 007	13	<1	<1	<0.01	0.02	0.34	0.46	0.15	0.01	0.01	<0.01
QTZ00 - 001	2	1	<1	<0.01	0.01	0.02	0.67	<0.01	0.01	0.01	0.01
QTZ00 - 002	142	5	10	0.07	1.26	1.48	3.50	0.70	0.07	0.21	0.17

Minimum Detection	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	10000	10000	10000	1.00	10.00	10.00	10.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

Test: Insufficient Sample, Dil=Delay, Max=No Estimate, P=No Check, x1000=8, Estim=, NS=1 Sample



# CERTIFICATE OF ANALYSIS

## iPL 00F0673

2036 Columbia Street  
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INTERNATIONAL PLASMA LABORATORY LTD.

Client : Northern Analytical Laboratories  
 Project: None Given

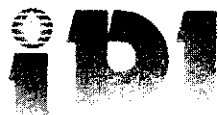
**9 Samples**  
 9=Pulp

[067309:57:44:00070700]      Out: Jul 06, 2000      Page 1 of 1  
 In : Jun 30, 2000      Section 1 of 2

Sample Name	Type	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm
MEL00 - 001	Pulp	<0.1	5	5	5	<5	<5	∅	1	<10	<2	<0.1	1	5	19	<5	165	3	56	<2
MEL00 - 002	Pulp	0.1	6	3	8	<5	<5	∅	<1	<10	<2	<0.1	1	4	24	<5	136	3	31	2
MEL00 - 003	Pulp	0.5	55	5	96	<5	<5	∅	3	<10	<2	1.2	18	39	57	<5	27	13	396	37
MEL00 - 004	Pulp	<0.1	5	4	5	<5	<5	∅	1	<10	<2	<0.1	1	5	23	<5	161	<2	20	2
MEL00 - 005	Pulp	0.3	21	6	26	20	<5	∅	12	<10	<2	0.5	4	16	54	<5	124	12	24	2
MEL00 - 006	Pulp	<0.1	4	2	2	<5	<5	∅	1	<10	<2	0.1	1	3	5	<5	192	<2	22	<2
MEL00 - 007	Pulp	0.3	12	<2	5	<5	<5	∅	1	<10	<2	<0.1	1	4	5	<5	229	<2	74	<2
QTZ00 - 001	Pulp	0.3	26	6	6	858	<5	∅	1	<10	<2	0.2	4	41	13	<5	403	<2	48	<2
QTZ00 - 002	Pulp	0.1	11	<2	87	<5	<5	∅	4	<10	<2	1.9	16	13	262	<5	69	167	5199	16

Minimum Detection	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2
Maximum Detection	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	100.0	10000	10000	10000	1000	10000	10000	10000	10000
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

No Test    Insufficient Sample    Del=Delay    Max=No Estimate    Rec=ReCheck    m=x1000    %=Estimate%    NS=No Sample



# CERTIFICATE OF ANALYSIS

## iPL 00F0673

1000-100 Street  
 Whitehorse  
 YT Y1A 2Z7  
 Canada  
 Tel: 867-668-879 7878  
 Fax: 867-668-879-7898

INTERNATIONAL PLASMA LABORATORY LTD

### Northern Analytical Laboratories

### 9 Samples

Out: Jul 06, 2000 In: Jun 30, 2000

[067309:57:44:00070700]

Project : None Given  
 Shipper : Norm Smith  
 Shipment: PO#: 176729  
 Analysis:  
 ICP(AqR)30

### Comment:

### Document Distribution

1 Northern Analytical Laboratories	EN RT CC IN FX
105 Copper Road	1 2 1 1 0
Whitehorse	DL 3D EM BT BL
YT Y1A 2Z7	0 0 0 0 0
Canada	
Att: Norm Smith	Ph: 867/668-4968
	Fx: 867/668-4890
	Em: NAL@hypertech.yk.ca

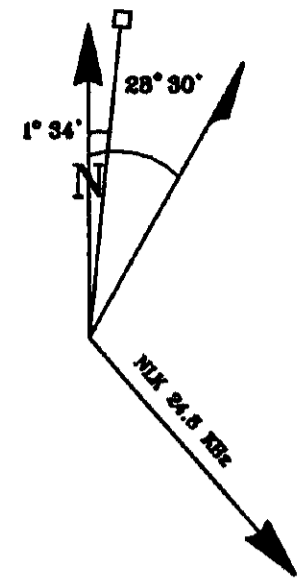
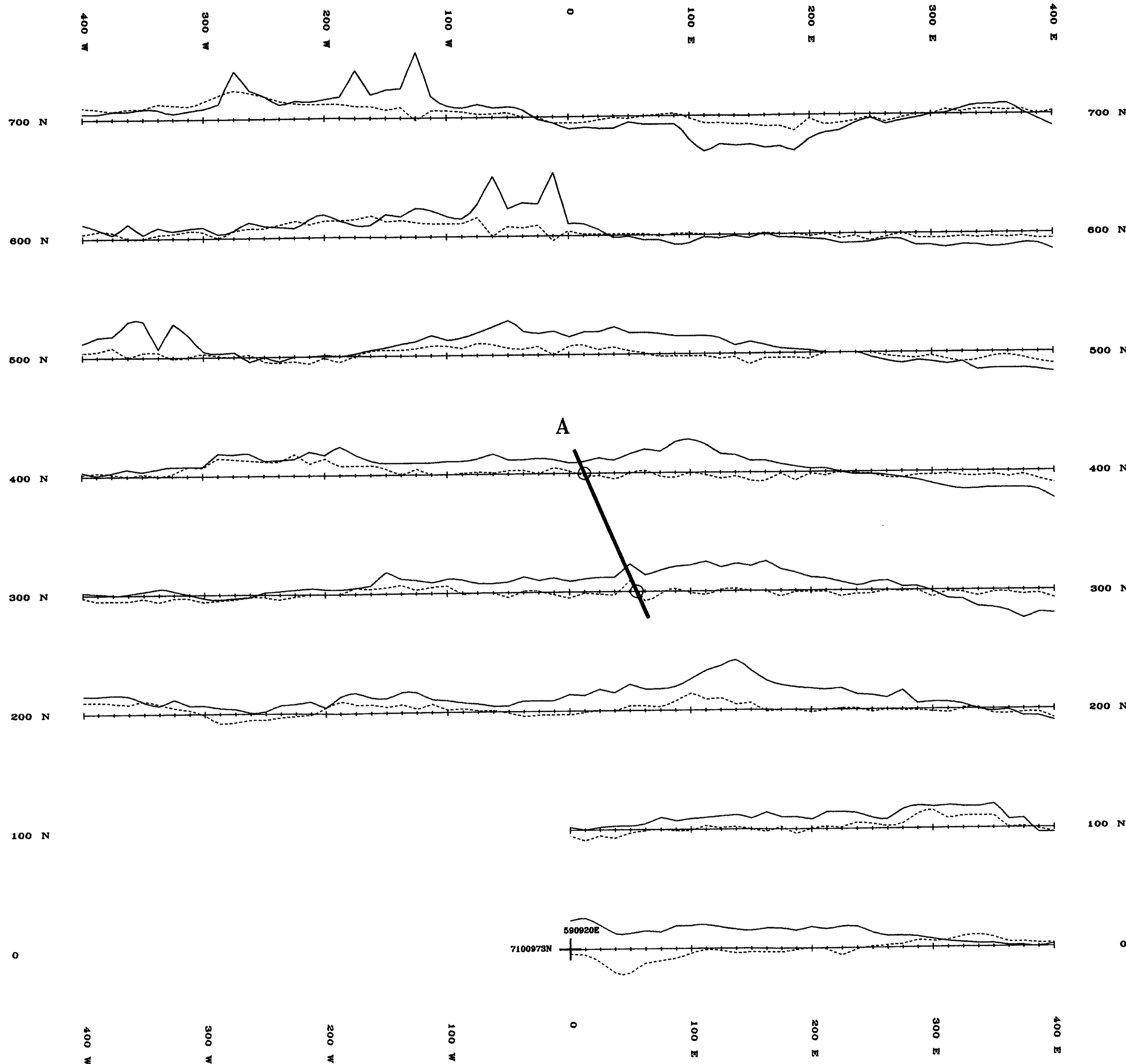
CODE	AMOUNT	TYPE	PREPARATION DESCRIPTION	PULP	REJECT
B31100	9	Pulp	Pulp received as it is, no sample prep.	12M/Dis	00M/Dis

Analytical Summary						NS=No Sample	Rep=Replicate	M=Month	Dis=Discard
##	Code	Method	Units	Description	Element	Limit Low	Limit High		
01	0721	ICP	ppm	Ag ICP	Silver	0.1	100.0		
02	0711	ICP	ppm	Cu ICP	Copper	1	20000		
03	0714	ICP	ppm	Pb ICP	Lead	2	20000		
04	0730	ICP	ppm	Zn ICP	Zinc	1	20000		
05	0703	ICP	ppm	As ICP	Arsenic	5	10000		
06	0702	ICP	ppm	Sb ICP	Antimony	5	1000		
07	0732	ICP	ppm	Hg ICP	Mercury	3	10000		
08	0717	ICP	ppm	Mo ICP	Molydenum	1	1000		
09	0747	ICP	ppm	Tl ICP (Incomplete Digestion)	Thallium	10	1000		
10	0705	ICP	ppm	Bi ICP	Bismuth	2	10000		
11	0707	ICP	ppm	Cd ICP	Cadmium	0.1	100.0		
12	0710	ICP	ppm	Co ICP	Cobalt	1	10000		
13	0718	ICP	ppm	Ni ICP	Nickel	1	10000		
14	0704	ICP	ppm	Ba ICP (Incomplete Digestion)	Barium	2	10000		
15	0727	ICP	ppm	W ICP (Incomplete Digestion)	Tungsten	5	1000		
16	0709	ICP	ppm	Cr ICP (Incomplete Digestion)	Chromium	1	10000		
17	0729	ICP	ppm	V ICP	Vanadium	2	10000		
18	0716	ICP	ppm	Mn ICP	Manganese	1	10000		
19	0713	ICP	ppm	La ICP (Incomplete Digestion)	Lanthanum	2	10000		
20	0723	ICP	ppm	Sr ICP (Incomplete Digestion)	Strontium	1	10000		
21	0731	ICP	ppm	Zr ICP	Zirconium	1	10000		
22	0736	ICP	ppm	Sc ICP	Scandium	1	10000		
23	0726	ICP	%	Ti ICP (Incomplete Digestion)	Titanium	0.01	1.00		
24	0701	ICP	%	Al ICP (Incomplete Digestion)	Aluminum	0.01	10.00		
25	0708	ICP	%	Ca ICP (Incomplete Digestion)	Calcium	0.01	10.00		
26	0712	ICP	%	Fe ICP	Iron	0.01	10.00		
27	0715	ICP	%	Mg ICP (Incomplete Digestion)	Magnesium	0.01	10.00		
28	0720	ICP	%	K ICP (Incomplete Digestion)	Potassium	0.01	10.00		
29	0722	ICP	%	Na ICP (Incomplete Digestion)	Sodium	0.01	5.00		
30	0719	ICP	%	P ICP	Phosphorus	0.01	5.00		

EN=Envelope # RT=Report Style CC=Copies IN=Invoices Fx=Fax(1=Yes 0=No) Totals: 1=Copy 1=Invoice 0=3/4 Disk  
 DL=Download 3D=3/4 Disk EM=E-Mail BT=BBS Type BL=BBS(1=Yes 0=No) ID=C030901

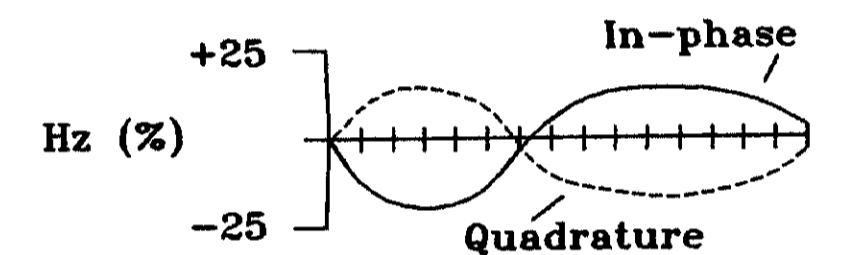
\*Our liability is limited solely to the analytical cost of these analyses.

IC Certified Assayer: David Chiu



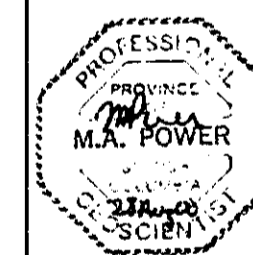
**EM ANOMALY SYMBOLS**

- Unknown
  - ⊕ <1 S
  - ⊕ 1-5 S
  - ⊕ 5-10 S
  - ⊕ 10-40 S
  - ⊕ >40 S
- Depth (m)
- Excess width (m)



**A** — CONDUCTOR AXIS

590920E  
7100973N + — UTM registration point



0 100m  
metres

Scale: 1: 2,500

094182

**JIM MCFAULL**

**MELINDA CLAIMS**

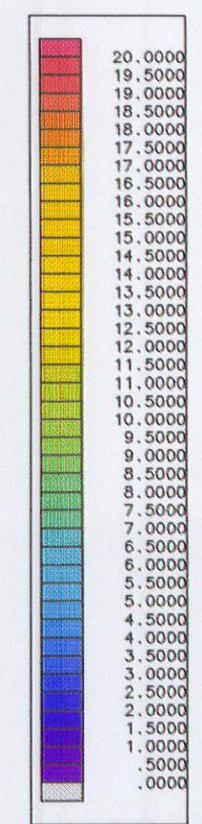
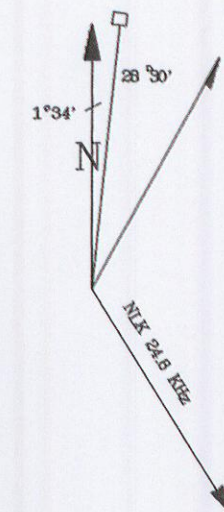
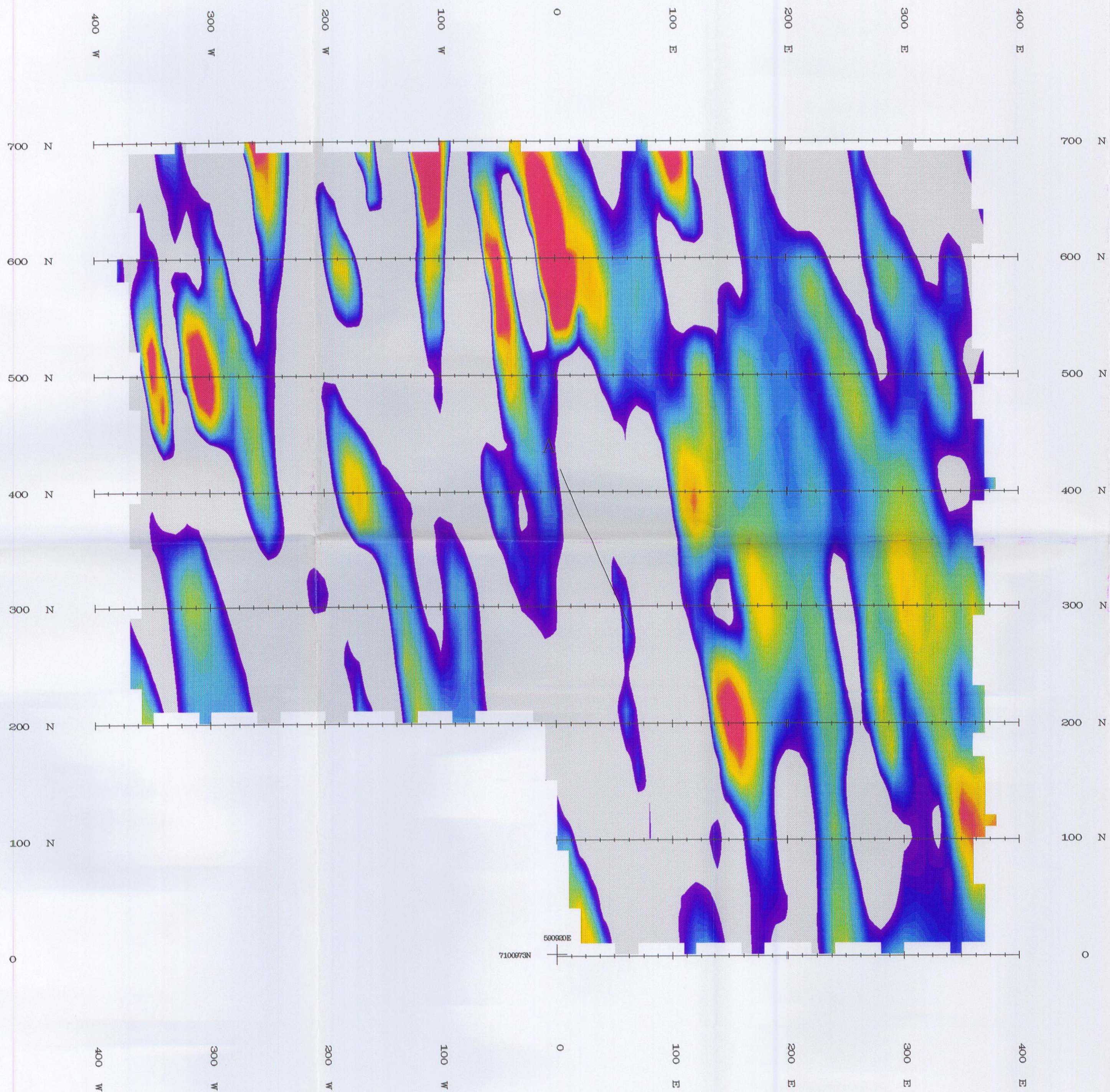
**EM-16 SURVEY  
STACKED PROFILES  
FIGURE 4.**

NTS: 116B/3 Datum: NAD83

Mining District: Dawson, YT

Job: 00-007 Date: 16 Jun 00

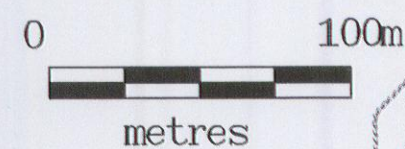
**AMEROK GEOSCIENCES LTD.**



In-phase (% Hz)  
 GRID CELL SIZE: 10 m

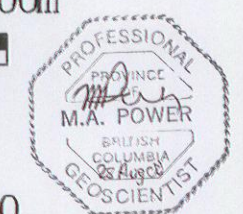
A — CONDUCTOR AXIS

560620E  
 7100973N + — UTM registration point



Scale: 1: 2,500

094182



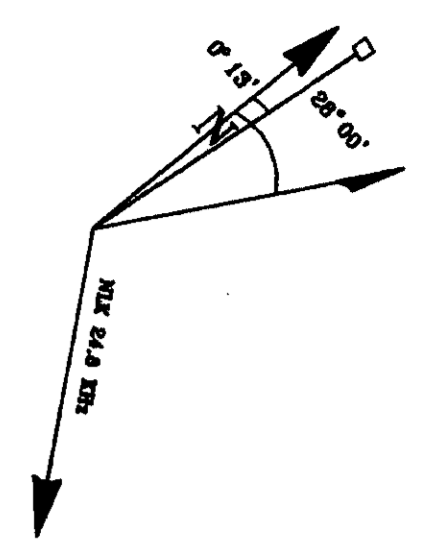
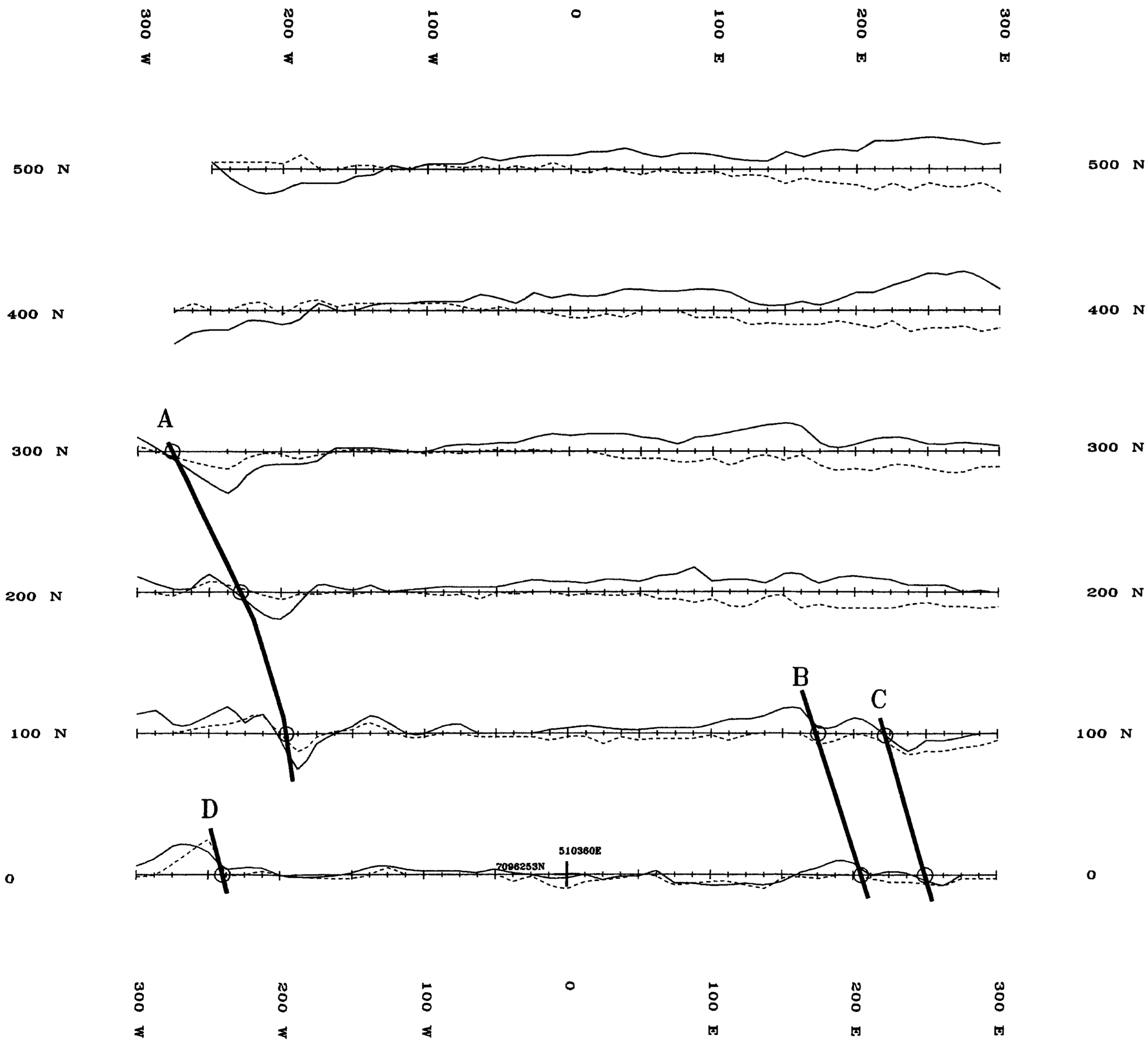
JIM MCFULL

MELINDA CLAIMS

EM-16 SURVEY  
 FRASER FILTERED IN-PHASE  
 Figure 5.

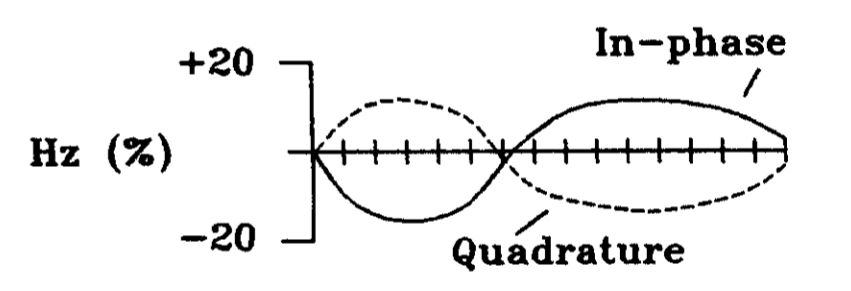
NTS: 116B/3	Datum: NAD83
Mining District: Dawson, YT	
Job: 00-007	Date: 16 Jun 00

AMEROK GEOSCIENCES LTD.



**EM ANOMALY SYMBOLS**

- Unknown
  - ⊕ <1 S
  - ⊕ 1-5 S
  - ⊕ 5-10 S
  - ⊕ 10-40 S
  - ⊕ >40 S
- Depth (m)
- Excess width (m)



**A** — CONDUCTOR AXIS

590920E  
7100973N + UTM registration point

0 100m  
metres

Scale: 1: 2,500

094182

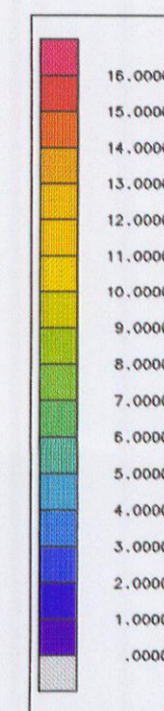
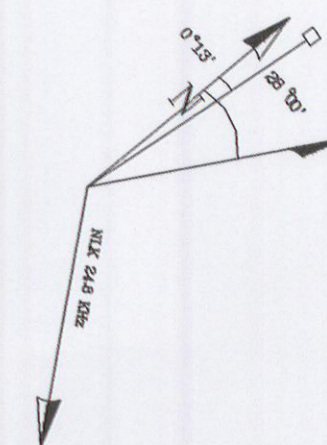
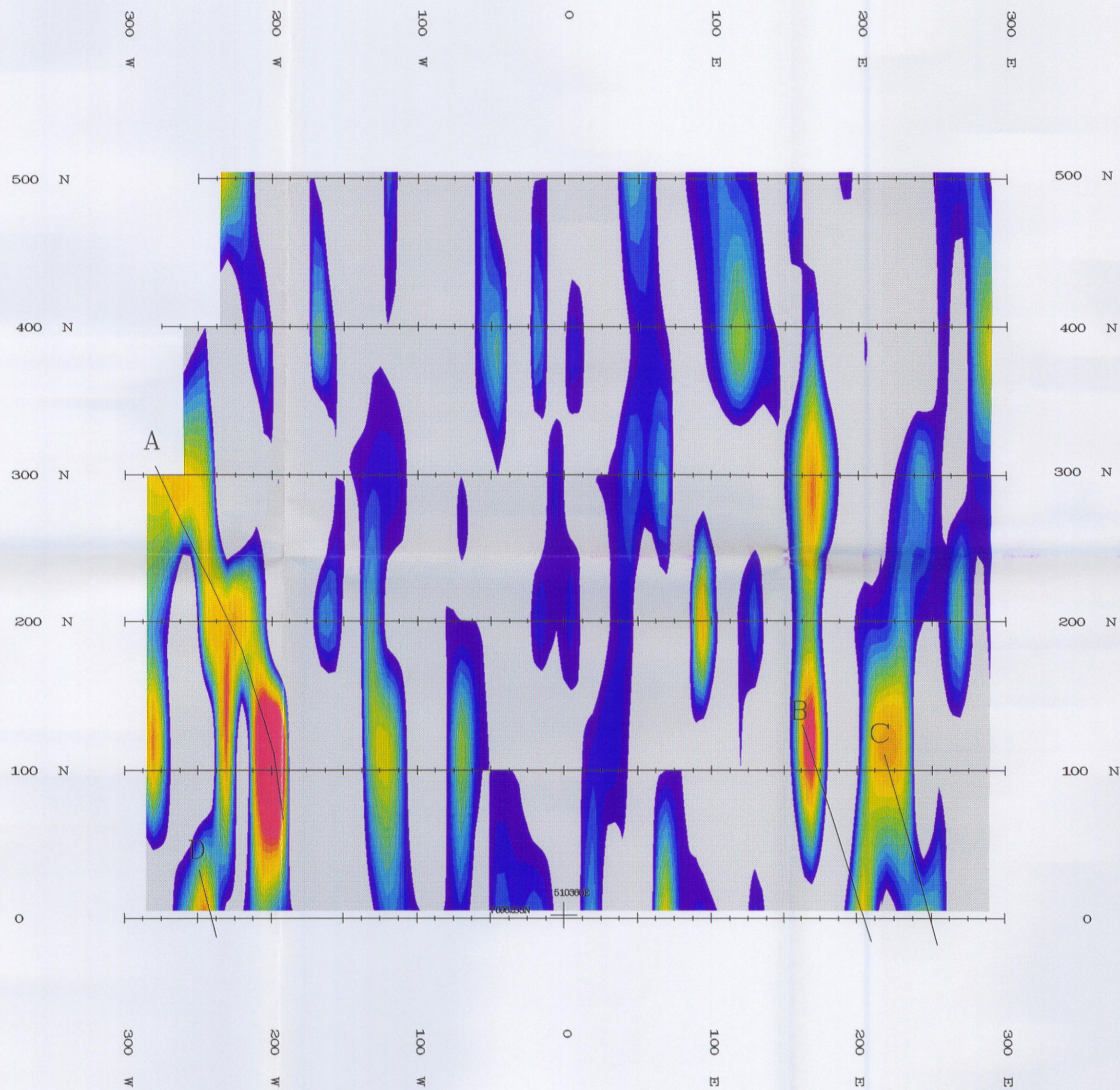
**JIM MCFAULL**

**QUARTZ CLAIMS**

**EM-16 SURVEY  
STACKED PROFILES  
FIGURE 7.**

NTS: 116C/2	Datum: NAD27
Mining District: Dawson, YT	
Job: 00-007	Date: 16 Jun 00

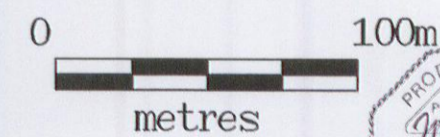
**AMEROK GEOSCIENCES LTD.**



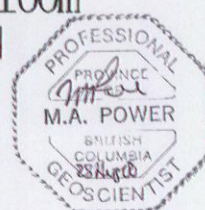
In-phase (% Hz)  
GRID CELL SIZE: 10 m

A — CONDUCTOR AXIS

590620E  
7100973N + UTM registration point



Scale: 1: 2,500



JIM MCFAULL


QUARTZ CLAIMS

EM-16 SURVEY  
FRASER FILTERED IN-PHASE  
Figure 8.

NTS: 116C/2 Datum: NAD27

Mining District: Dawson, YT

Job: 00-007 Date: 16 Jun 00

 AMEROK GEOSCIENCES LTD.